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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/058,571	01/28/2002	Matthew W. Holtcamp	2002U002.US	4310

25959 7590 04/20/2004

UNIVATION TECHNOLOGIES LLC  
5555 SAN FELIPE, SUITE 1950  
HOUSTON, TX 77056

EXAMINER
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BROWN, JENNINE M

ART UNIT	PAPER NUMBER
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1755

DATE MAILED: 04/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/058,571

Applicant(s)

HOLTCAMP, MATTHEW W.

Examiner

Jennine M. Brown

Art Unit

1755

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 July 2003.  
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-22 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 07/17/2003.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

***Specification***

Examiner has entered Applicants amendment, which obviates Examiners previous objection, therefore the objection has been withdrawn.

***Claim Objections***

Examiner has entered Applicants amendment, which obviates Examiners previous objection, therefore the objection has been withdrawn.

***Claim Rejections - 35 USC § 112***

Examiner has entered Applicants amendment, which obviates Examiners previous rejection, therefore the rejection has been withdrawn.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Erker, et al. (US 6486277 B1).

Erker, et al. disclose a catalyst system containing a group 13 (boron containing) activator compound (Formula I or II – A represents a boron atom and R<sup>1</sup> represent pentafluorophenyl group with X representing unsaturated heterocyclic structures with nitrogen as the heteroatom) used for the polymerization of olefins (col. 77, l. 11-43). The cation M<sup>1</sup>L<sub>n</sub> is also disclosed. (col. 4, l. 11 – col. 5, l. 25 and examples of formula I given from col. 5, l. 26 –

col. 69, l. 62) Preferred compounds in which the pyrrole is replaced by imidazole, benzimidazole and indole are preferred (col. 69, l. 63-65). Ionic cocatalysts can also be used (col. 73, l. 9-63).

Claims 1-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Holtcamp (US 6632770 B2).

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Holtcamp discloses a bronsted acid cation ( $[L-H]^+$ ) and anion ( $[MQ_n]^-$ ) where M is a group 13 element and Q is a group which includes halosubstituted hydrocarbyl radicals or hydrocarbyl group with up to 20 carbon atoms. (col. 2, l. 33 – col. 3, l. 14) as well as an activator composition combined with the bulky ligand metallocene catalyst (formula VI, VII, VIII, IX, X, XI; col. 11, l. 22 – col. 16, l. 17). Polymerization using the catalyst systems are given (col. 23, l. 50 – col. 24, l. 31).

Claims 1-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Holtcamp, et al. (US 6703338 B2).

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C.

Art Unit: 1755

102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Holtcamp discloses an M(JY) compound where M is aluminum or boron and J is a nitrogen atom contained in a heterocyclic group Y which can be indolyl which can further be substituted with halogen. (col. 5, l. 56 – col. 6, l. 42) Further activator compositions are also given such as formulas V, VI, VII, VIII, IX and X (col. 8, l. 53 – col. 13, l. 45). The activators, catalyst systems and supported catalyst systems are suitable for use in any prepolymerization and/or polymerization process over a wide range of temperatures and pressures (col. 18, l. 64 – col. 19, l. 1) such as olefin polymerization (col. 19, l. 10-12).

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 21-22 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20 of US 6610803 B1 (Wenzel).

Although the conflicting claims are not identical, they are not patentably distinct from each other because the patented process claims are the genus for the species claimed in claims 21-

Art Unit: 1755

22. The published claims disclose a process for polymerizing olefins by contacting a monomer and under polymerization conditions with a catalyst composition comprising at least a bulky ligand metallocene type catalyst and activator. It would have been obvious to one of ordinary skill in the art to substitute the catalyst or activator or both to modify the conditions of the polymerization to change the properties of the polymer desired such as stereospecificity.

Claims 1-20 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-19 of US 6632770 B2 (Holtcamp). Although the conflicting claims are not identical, they are not patentably distinct from each other because both claim an activator compound comprising a cationic and anionic species such that the cationic species is a bronsted acid and the anionic species is a boron or aluminum based compound with a group 15 or 16 heteroatom containing heterocyclic group substituted with halogen or halogen containing group. It would have been obvious to one of ordinary skill in the art to substitute one of the group 13 elements for another or one of the group 15 or 15 elements as previously patented or modify the heterocyclic group by modifying the substituents because each modification would create subtle differences in the polymer produced such as stereospecificity.

Claims 21-22 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-22 of US 6632901 B2 (McCullough). Although the conflicting claims are not identical, they are not patentably distinct from each other because the patented process claims are the genus for the species claimed in claims 21-22. The published claims disclose a process for polymerizing olefins by contacting a monomer

Art Unit: 1755

and under polymerization conditions with a catalyst composition comprising at least a bulky ligand metallocene type catalyst and activator. It would have been obvious to one of ordinary skill in the art to substitute the catalyst or activator or both to modify the conditions of the polymerization to change the properties of the polymer desired such as stereospecificity.

Claims 1-20 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-13, 22-35 of US 6703338 B2 (Holtcamp et al). Although the conflicting claims are not identical, they are not patentably distinct from each other because both claim an activator compound comprising a cationic and anionic species such that the cationic species is a bronsted acid and the anionic species is a boron or aluminum based compound with a group 15 or 16 heteroatom containing heterocyclic group substituted with halogen or halogen containing group. It would have been obvious to one of ordinary skill in the art to substitute one of the group 13 elements for another or one of the group 15 or 15 elements as previously patented or modify the heterocyclic group by modifying the substituents because each modification would create subtle differences in the polymer produced such as stereospecificity.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-22 have been considered but are moot in view of the new grounds of rejection.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennine M. Brown whose telephone number is (571) 272-1364. The examiner can normally be reached on M-F 8:00 AM - 6:00 PM; first Friday off.

Art Unit: 1755

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Bell can be reached on (571) 272-1700. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jmb



**Mark L. Bell**  
Supervisory Patent Examiner  
Technology Center 1700